REMARKS/ARGUMENTS

Claims 1, 3-10, 26, and 28-38 are active in this application.

Support for the amendments to Claims 1 and 26 is found in Claims 2 and 27, the specification on page 7, lines 19-23 (with reference to Fig. 1), and page 8, lines 21-23 (which also supports new claims 37-38.

No new matter is added by entering these amendments.

Applicants thank Examiner Lu for meeting with their U.S. representative on July 17, 2006 to discuss the issues in this case. During this meeting, the amendments that are submitted here were discussed. Specifically, Claims 1 and 26 (the independent claims) are amended to define that the immobilized nucleic acid is on the inner surface of capillary and the solution of DNA polymerase and dNTP and/or NTP are provided in a manner that they are entrapped in the hydrophobic solvent that is allowed to flow through the capillary. It was discussed that the manner in which this process is carried out is not describe or suggested by the cited references. It is the understanding of the undersigned that agreement was reached on this basis; however, the examiner requested filing a Request for Continued Examination as the application is currently under final rejection. Accordingly, accompanying this amendment is such a Request.

Further discussion on the differences between the claimed method and the cited publications is provided below.

In addition to Applicants previous remarks pertaining to the rejection in view of Parce and Innis, it should be noted that Parce describes that the template and/or primer attached to particles are flowed through or positioned in a microscale channel (see col. 4, lines 10-16). However, there is no description in Parce for the claimed feature of immobilizing a nucleic acid on the inner wall of the capillary and providing dNTP and/or NTP entrapped in a

hydrophobic solvent. Innis is relied upon to allege that it would have been obvious to use mineral oil to overlay a solution. However, Innis does not describe capillaries and there is no suggestion or teaching in either of the two references for how one would overlay mineral oil in a microscale channel. Therefore, one would not have modified the Parce method to overlay mineral oil as in Innis.

Further, as discussed in Applicants' prior response, while Innis teach overlaying mineral oil to prevent evaporation, this is not the same as entrapping a solution within a hydrophobic solvent. In particular, in the Innis method, when mineral oil is overlays the reaction solution in the microtiter plate, one side of the reaction solution contacts the mineral oil layer and at least one other side contacts the bottom of the reaction vessel—this is not the same as entrapping the reaction solution as set forth in the claims.

The introduction of the reaction solution containing polymerase, nucleotides etc, is entrapped by the hydrophobic solvent facilitates the reaction in terms of limiting the reaction to only sites where the nucleotide is immobilized and inhibiting unreacted nucleotides from being adsorbed in inappropriate places, which is disadvantageous in terms of having to wash away unreacted nucleotides. Furthermore, by entrapping the reaction solution (not simply overlaying as in Innis) background signals can be greatly decreased.

In view of these additional points of distinction, Applicants again ask that the 103(a) rejection be withdrawn.

Furthermore, Claims 5 and 30; and Claims 6 and 31 would not have been obvious in view of Parce and Innis combined with Mathies or Anazawa.

Mathies is relied upon to provide the use of confocal fluorescence microscopy to detect fluorescent signals. Matheis does not suggest replacing the chain terminating

nucleotide in Parce, immobilizing the nucleic acid on an inner surface of a capillary and entrapping the reaction solution in the hydrophobic solvent, which flows through the capillary as claimed. Therefore, the combination of these publications provides no description or reasonable suggestion for the invention claimed in Claims 1 and 26 as well as the embodiments set forth in Claims 5 and 30. Withdrawal of the rejection of Claims 5 and 30 under 35 U.S.C. § 103(a) is requested.

Anazawa describe a primer extension reaction using DNA polymerase and four types of NTPs, each of which are differentially labeled (see column 6, lines 27-33 of Anazawa). Anazawa is relied upon to provide the use of lasers to disrupt the dye molecule. Anazawa does not suggest replacing the chain terminating nucleotide in Parce immobilizing the nucleic acid on an inner surface of a capillary and entrapping the reaction solution in the hydrophobic solvent, which flows through the capillary as claimed. Therefore, the combination of these publications provides no description or reasonable suggestion for the invention claimed in Claims 1 and 26 as well as the embodiments set forth in Claims 6 and 31. Withdrawal of the rejection of Claims 6 and 31 under 35 U.S.C. § 103(a) is requested.

Applicants also request a notice of allowance confirming the allowability of all pending claims.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, he is encouraged to contact Applicants' undersigned representative at the below listed telephone number.

Respectfully submitted,

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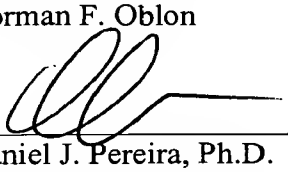
Norman F. Oblon



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